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NOTICE OF ALLOWANCE AND FEE(S) DUE

23373 7590 08/12/2010

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

PHILLIPS, HASSAN A

ART UNIT

PAPER NUMBER

2451

DATE MAILED: 08/12/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/912,575

07/26/2001

Sung-Ho Kang

Q116864

5495

TITLE OF INVENTION: NETWORK SYSTEM AND METHOD OF CONTROLLING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	11/12/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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23373 7590 08/12/2010

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/912,575 07/26/2001 Sung-Ho Kang Q116864 5495

TITLE OF INVENTION: NETWORK SYSTEM AND METHOD OF CONTROLLING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1510 \$300 \$0 \$1810 11/12/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
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PHILLIPS, HASSAN A 2451 709-217000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

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Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,575	07/26/2001	Sung-Ho Kang	Q116864	5495
23373	7590	08/12/2010	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			PHILLIPS, HASSAN A	
			ART UNIT	PAPER NUMBER
			2451	
DATE MAILED: 08/12/2010				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 2036 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 2036 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No.	Applicant(s)	
	09/912,575	KANG, SUNG-HO	
	Examiner	Art Unit	
	HASSAN PHILLIPS	2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications filed June 8, 2010.
2. ☒ The allowed claim(s) is/are 1,4,5,7,10-13,16,19,21,22,24,25,27,28,30 and 31.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other ____. |
|---|---|

/HASSAN PHILLIPS/
Primary Examiner, Art Unit 2451

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Seunghee Park (60,719) on July 28, 2010.

The application has been amended as follows:

Claim 1. A network system, comprising:

at least one network unit having a variable Internet protocol (IP) address and unique identification information;

a dynamic host configuration protocol (DHCP) server responsive to a request from said at least one network unit for assigning said variable IP address to said at least one network unit for a predetermined period of time; and

an agent server comprising:

 a communication unit for receiving said unique identification information and said variable IP address from said at least one network unit, for transferring said unique identification information

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and said variable IP address, and for receiving from a user unique identification information of a network unit selected by the user;

a database connected to said communication unit for receiving and storing said variable IP address and said unique identification information transferred from said communication unit;

and

a control unit connected to said communication unit and to said database for receiving from the user via said communication unit said unique identification information of said network unit selected by the user, for searching said database for said variable IP address of said at least one network unit on the basis of the unique identification information received from the user, and for enabling the user to gain access to said selected network unit in accordance with results of the searching of said database,

wherein said unique identification information received from the user comprises at least one of an Ethernet address of said at least one network unit and a search keyword for said variable IP address of said at least one network unit,

wherein the Ethernet address comprises an address which corresponds to and is not the same as said unique identification information received from said at least one network unit, and

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wherein the search keyword comprises a keyword which corresponds to and is not the same as said unique identification information received from said at least one network unit.

Claim 7. A method of controlling a network system having a dynamic host configuration protocol (DHCP) server, an agent server, and at least one network unit, said method comprising the steps of:

(a) requesting a variable Internet protocol (IP) address for said at least one network unit from said DHCP server when said at least one network unit powers up;

(b) transmitting the requested variable IP address from said DHCP server to said at least one network unit;

(c) storing unique identification information and the variable IP address of said at least one network unit in a database in said agent server;

(d) receiving data at said agent server from a user over a network, comparing said received data with said unique identification information stored in said database, and searching for said variable IP address of said at least one network unit when said comparing produces a match; and

(e) connecting the user to said at least one network unit having the searched variable IP address;

wherein said method further comprises the steps, between steps (b) and (c), of receiving said unique identification information and said variable IP address of said at least one network unit at said agent server, and transferring said unique identification

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information and said variable IP address of said at least one network unit to said database in said agent server, and

wherein said received data from the user comprises at least one of an Ethernet address of said at least one network unit and a search keyword for said variable IP address of said at least one network unit,

wherein the Ethernet address comprises an address which corresponds to and is not the same as said unique identification information received from said at least one network unit, and

wherein the search keyword comprises a keyword which corresponds to and is not the same as said unique identification information received from said at least one network unit.

Claim 11. The method as set forth in ~~Claim 10~~ Claim 7, wherein data stored in said database is updated at regular time intervals.

Claim 13. A network system comprising a dynamic host configuration protocol (DHCP) server, an agent server, and at least one network unit having a variable Internet protocol (IP) address assigned to said at least one network unit by said DHCP server, and unique identification information, said agent server comprising:

a communication unit for receiving, from each said at least one network unit, said variable IP address assigned to said at least one network unit by said DHCP server and

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said unique identification for each said at least one network unit, and for receiving from a user unique identification information for a network unit selected by the user;

storing means connected to said communication unit for receiving and storing said variable IP address and said unique identification information for each said at least one network unit; and

a control unit connected to said communication unit and to said storing means for receiving the unique identification information for the network unit selected by the user, and for searching said storing means for said variable IP address of said selected network unit on the basis of the unique identification information received from the user, and responsive to results produced by said searching for enabling the user to gain access to said selected network unit;

wherein said storing means comprises a database, said communication unit transferring said received unique identification information and said variable IP address to said database; and

wherein the unique identification information received from the user includes at least one of an Ethernet address of said at least one network unit and a search keyword for said variable IP address of said at least one network unit,

wherein the Ethernet address comprises an address which corresponds to and is not the same as said unique identification information received from said at least one network unit, and

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wherein the search keyword comprises a keyword which corresponds to and is not the same as said unique identification information received from said at least one network unit.

Claim 19. A method of controlling a network system having a dynamic host configuration protocol (DHCP) server, an agent server, and at least one network unit, said method comprising the steps of:

(a) requesting a variable Internet protocol (IP) address for said at least one network unit from said DHCP server when said at least one network unit powers up;

(b) transmitting the requested variable IP address from said DHCP server to said at least one network unit;

(c) storing unique identification information and the variable IP address of each said at least one network unit in a database in said agent server;

(d) receiving at said agent server, from a user, unique identification information corresponding to a network unit selected by the user;

(e) comparing said unique identification information received from the user with said unique identification information stored in said database;

(f) determining said variable IP address of said network unit selected by the user when step (e) produces a match; and

(g) connecting the user to said selected network unit having the determined variable IP address;

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wherein said unique identification information received from the user comprises at least one of an Ethernet address of said at least one network unit and a search keyword for said variable IP address of said at least one network unit,

wherein the Ethernet address comprises an address which corresponds to and is not the same as said unique identification information received from said at least one network unit, and

wherein the search keyword comprises a keyword which corresponds to and is not the same as said unique identification information received from said at least one network unit.

Claim 23. (Cancelled)

Claim 24. The network system as set forth in ~~Claim 23~~ Claim 1, wherein the search keyword which corresponds to and is not the same as said unique identification information received from said at least one network unit is a common gateway interface (CGI) search keyword.

Claim 26. (Cancelled)

Claim 27. The method as set forth in ~~Claim 26~~ Claim 7, wherein the search keyword which corresponds to and is not the same as said unique identification information

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received from said at least one network unit is a common gateway interface (CGI) search keyword.

Claim 29. (Cancelled)

Claim 30. The network system as set forth in ~~Claim 29~~ Claim 13, wherein the search keyword which corresponds to and is not the same as said unique identification information received from said at least one network unit is a common gateway interface (CGI) search keyword.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: amendments have been made to the claims to clearly define applicant's claimed invention to distinguish from the teachings of the cited prior art. More specifically, the prior art of record failed to expressly disclose, when read together with the other recited limitations, "wherein the Ethernet address comprises an address which corresponds to and is not the same as said unique identification information received from said at least one network unit, and wherein the search keyword comprises a keyword which corresponds to and is not the same as said unique identification information received from said at least one network unit", as recited in Independent claims 1, 7, 13, and 19.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HASSAN PHILLIPS whose telephone number is (571)272-3940. The examiner can normally be reached on M-F 9a-5:30p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HASSAN PHILLIPS/
Primary Examiner, Art Unit 2451